BISS Biodiversity Information Science and Standards

Biodiversity Information Science and Standards 2: e26367
doi: 10.3897/biss.2.26367

OPEN ACCESS

Conference Abstract

African Biodiversity Challenge: Integrating Freshwater Biodiversity Information to Guide Informed Decision-Making in Rwanda

Yvette Umurungi‡, Samuel Kanyamibwa§, Faustin Gashakamba§, Beth Kaplin‡

‡ Center of Excellence in Biodiversity and Natural Resources Management at University of Rwanda, Huye, Rwanda
§ Albertine Rift Conservation Society, Kigali, Rwanda

Corresponding author: Yvette Umurungi (umurungiyvette@gmail.com), Samuel Kanyamibwa (skanyamibwa@arcosnetwork.org), Faustin Gashakamba (fgashakamba@arcosnetwork.org), Beth Kaplin (bkaplin@ur.ac.rw)

Received: 02 May 2018 | Published: 22 May 2018

Citation: Umurungi Y, Kanyamibwa S, Gashakamba F, Kaplin B (2018) African Biodiversity Challenge: Integrating Freshwater Biodiversity Information to Guide Informed Decision-Making in Rwanda. Biodiversity Information Science and Standards 2: e26367. https://doi.org/10.3897/biss.2.26367

Abstract

Freshwater biodiversity is critically understudied in Rwanda, and to date there has not been an efficient mechanism to integrate freshwater biodiversity information or make it accessible to decision-makers, researchers, private sector or communities, where it is needed for planning, management and the implementation of the National Biodiversity Strategy and Action Plan (NBSAP). A framework to capture and distribute freshwater biodiversity data is crucial to understanding how economic transformation and environmental change is affecting freshwater biodiversity and resulting ecosystem services. To optimize conservation efforts for freshwater ecosystems, detailed information is needed regarding current and historical species distributions and abundances across the landscape. From these data, specific conservation concerns can be identified, analyzed and prioritized.

The purpose of this project is to establish and implement a long-term strategy for freshwater biodiversity data mobilization, sharing, processing and reporting in Rwanda. The expected outcome of the project is to support the mandates of the Rwanda Environment Management Authority (REMA), the national agency in charge of

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environmental monitoring and the implementation of Rwanda's NBSAP, and the Center of Excellence in Biodiversity and Natural Resources Management (CoEB). The project also aligns with the mission of the Albertine Rift Conservation Society (ARCOS) to enhance sustainable management of natural resources in the Albertine rift region. Specifically, organizational structure, technology platforms, and workflows for the biodiversity data capture and mobilization are enhanced to promote data availability and accessibility to improve Rwanda's NBSAP and support other decision-making processes. The project is enhancing the capacity of technical staff from relevant government and non-government institutions in biodiversity informatics, strengthening the capacity of CoEB to achieve its mission as the Rwandan national biodiversity knowledge management center. Twelve institutions have been identified as data holders and the digitization of these data using Darwin Core standards is in progress, as well as data cleaning for the data publication through the ARCOS Biodiversity Information System (http://arbmis.arcosnetwork.org/). The release of the first national State of Freshwater Biodiversity Report is the next step. CoEB is a registered publisher to the Global Biodiversity Information Facility (GBIF) and holds an Integrated Publishing Toolkit (IPT) account on the ARCOS portal. This project was developed for the African Biodiversity Challenge, a competition coordinated by the South African National Biodiversity Institute (SANBI) and funded by the JRS Biodiversity Foundation which supports on-going efforts to enhance the biodiversity information management activities of the GBIF Africa network. This project also aligns with SANBI's Regional Engagement Strategy, and endeavors to strengthen both emerging biodiversity informatics networks and data management capacity on the continent in support of sustainable development.

Keywords

Data mobilisation, data use, digitisation, publication

Presenting author

Yvette Umurungi

Hosting institution

Center of Excellence in Biodiversity and Natural Resources Management (CoEB)

University of Rwanda, Rwanda